

No Adverse Impact

A Common Sense Strategy for Floodplain Management

*Modified from the ASFPM Presentation
For the City of Lincoln
Mayor's Floodplain Task Force
November 19, 2002*

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ASFPM Mission



Mitigate the losses, costs, and human suffering caused by flooding.

and

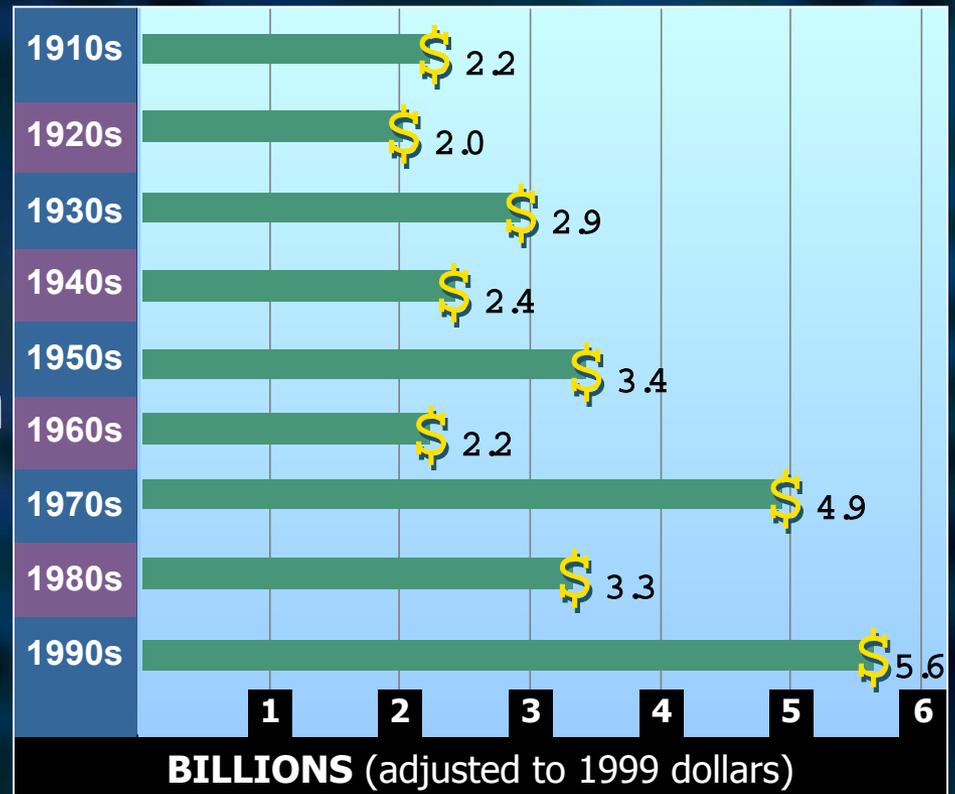


Protect the natural and beneficial functions of floodplains.

Trends in Flood Damages

- \$6 billion annually
- Per Capita Damages increased by more than a factor of 2.5 in the previous century in real dollar terms

Average Annual Flood Loss by Decade



What is Influencing the Trend?

Increased Property at Risk

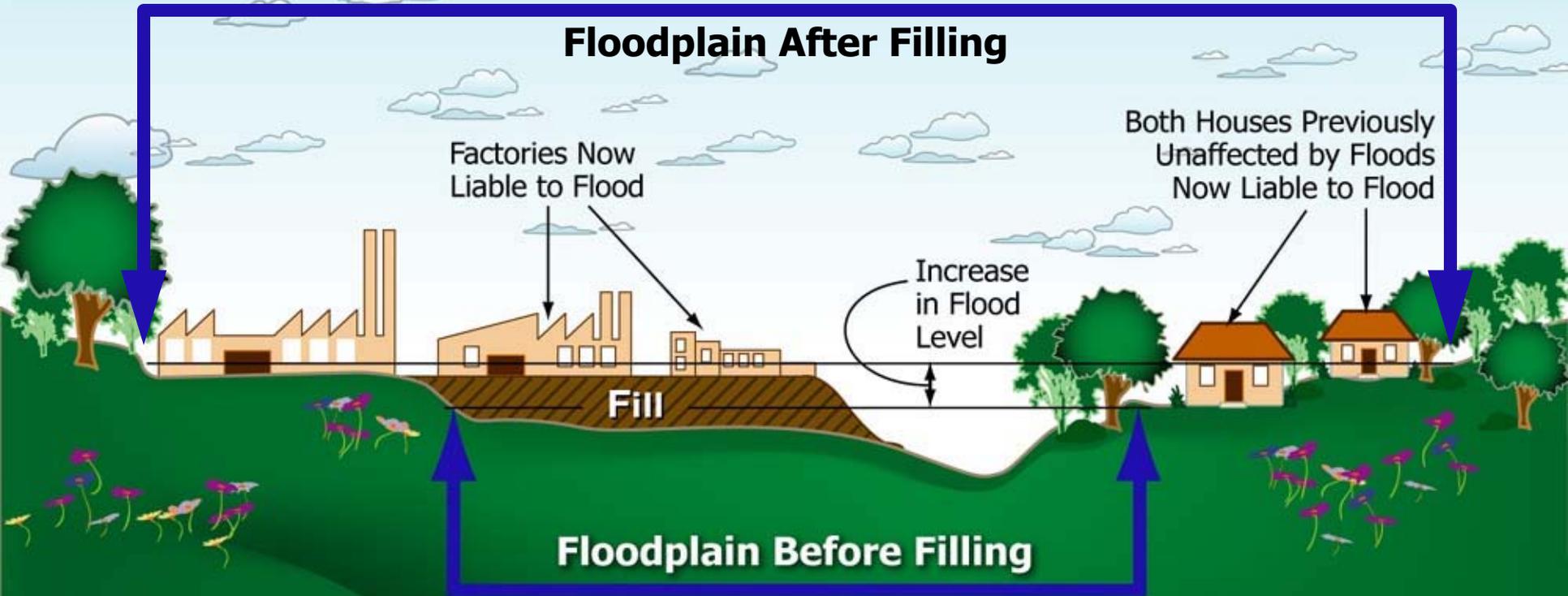
Current policy:

- Promotes intensification in risk areas
- Ignores changing conditions
- Ignores adverse impacts to existing properties
- Undervalues natural floodplain functions

Central Message

Even if we perfectly implement
current standards,
damages will increase.

Today's Floodplain Is Not Necessarily Tomorrow's Floodplain



**If large areas of the floodplain are filled, then there will be an increase in the land area needed to store flood waters.
This means your home or business may be impacted.**

Why No Adverse Impact?

Flood damages are rapidly increasing
unnecessarily!

Current approaches deal primarily with *how to build in a floodplain vs. how to minimize future damages*

Because NAI is a "*good neighbor*" policy.

No Adverse Impact Explained

NAI is a concept/policy/strategy that broadens one's focus from the built environment to include how changes to the built environment potentially impact other properties.

NAI broadens property rights by protecting the property rights of those that would be adversely impacted by the actions of others.

No Adverse Impact Defined

Activities that could adversely impact flood damage to another property or community will be allowed only to the extent that the impacts are mitigated or have been accounted for within an adopted community-based plan.

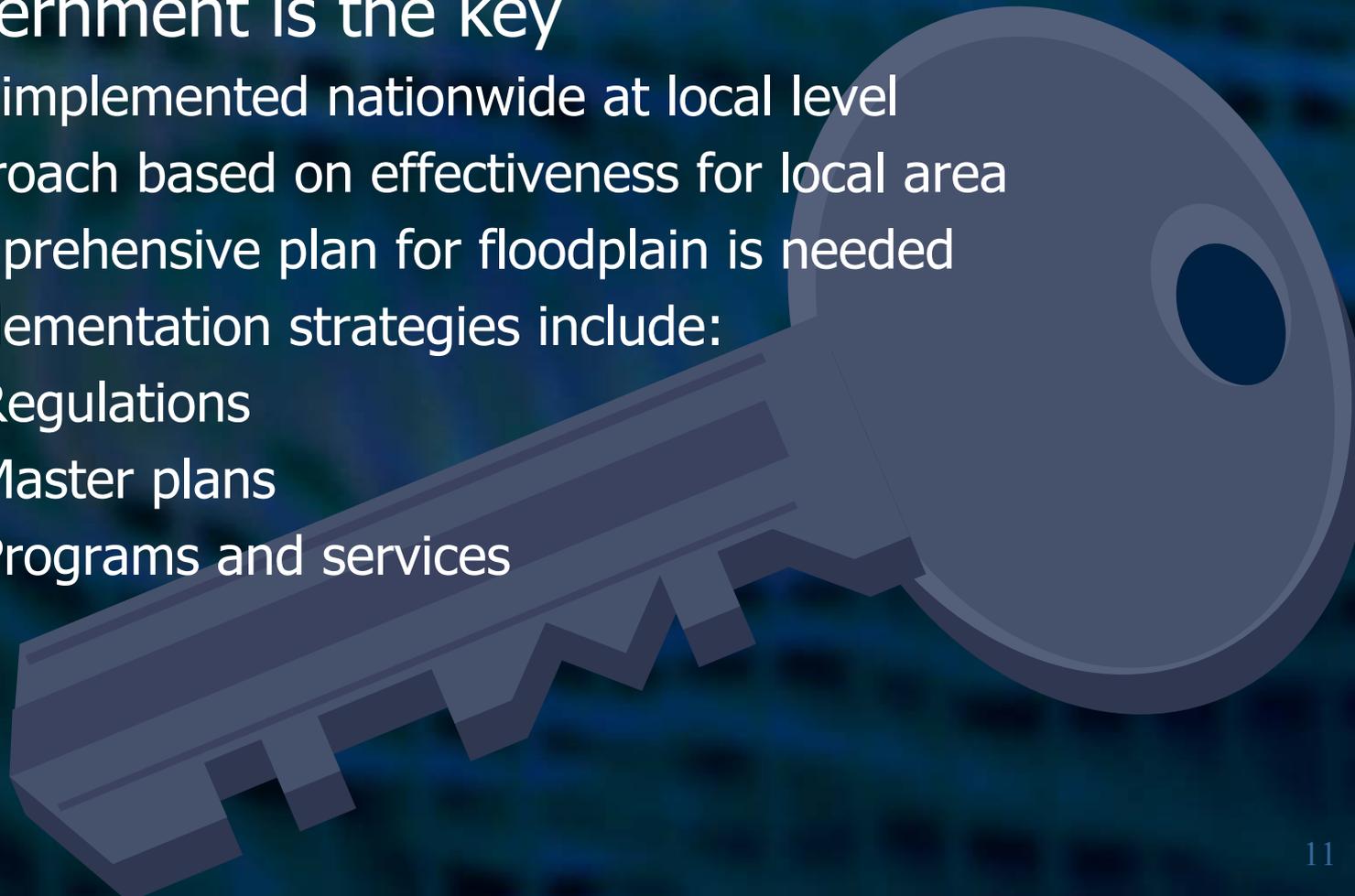
No Adverse Impact Floodplain

A 'No Adverse Impact Floodplain' is one where the action of one property owner does not adversely impact the flooding risk for other properties, as measured by increased flood stages, flood velocity, flows, or the increased potential for erosion and sedimentation, unless the impact is mitigated as provided for in a community or watershed based plan.

No Adverse Impact Roles

Local government is the key

- NAI implemented nationwide at local level
- Approach based on effectiveness for local area
- Comprehensive plan for floodplain is needed
- Implementation strategies include:
 - ▶ Regulations
 - ▶ Master plans
 - ▶ Programs and services



ASFPM Actions:

- Promote and explain NAI concepts
- Identify approaches and tools to implement NAI at the local level
- Share NAI success stories
- Document and measure the benefits of NAI approaches

Community Activities that can Incorporate NAI:

NAI Building Blocks

- Hazard Identification
- Planning
- Infrastructure
- Emergency Services
- Regulations and Standards
- Corrective Actions
- Education and Outreach

Regulations and Standards

- Your community should consider all impacts of your standards--both now and in future years
- Policies and regulations must go beyond the minimum NFIP to actually reduce future damage
- Examples to consider:
 - No rise floodways
 - Freeboard above flood elevation

Impacts of Floodplain Development

- Increased flood stages
- Increased velocities
- Increased flows
- Erosion and sedimentation
- Loss of other natural/beneficial functions

Community Approaches

- No single approach for adopting NAI
- Wide range among different communities
- Must agree on concept
- Adopt local standards that fulfill concept

Community Case Examples

1. Comprehensive Regulations
2. Planning and Management
3. Future Conditions Hazard Area

DuPage County, Illinois

Comprehensive Regulations

- ⇒ Compensatory storage = 1.5 x volume displaced
- ⇒ 0' Rise in flood elevations
- ⇒ Mapping based on future conditions
- ⇒ No net loss of wetlands
- ⇒ Mitigation for impacts to riparian functions
- ⇒ No variances for floodplain standards
- ⇒ 1' freeboard required, even for structures outside floodplain
- ⇒ Stormwater management plan and capital projects
- ⇒ Buyout program

Maricopa County, Arizona

Planning and Management

- ⇒ Required *total* retention of 100-year, 2-hour runoff
- ⇒ Adoption of erosion setback zones along watercourses
- ⇒ Area Drainage Master Study - ID floodprone areas and structural/non-structural solutions
- ⇒ Watercourse Master Plans - emphasis on non-structural solutions and multi-use opportunities

Charlotte-Mecklenburg, North Carolina

Future Conditions Hazard Area

- ⇒ New development must stay outside 1/10'-rise floodway
- ⇒ Floodplain mapping/regulations based upon ultimate development in upstream watershed
- ⇒ 1' freeboard protection above 'ultimate' future flood elevation
- ⇒ Local adoption of water quality stream buffer regulations
- ⇒ Mecklenburg County Floodplain Management Guidance Document
- ⇒ Preparation of Flood Hazard Mitigation Plans based on watershed areas
- ⇒ Stormwater management program funded by stormwater fee

Mayor's Floodplain Task Force *Charge Statement*

The goal of the Mayor's Floodplain Task Force is to formulate **recommendations regarding the development of permanent floodplain standards** that address the natural functions of floodplains and reduction of future flooding hazards in Lincoln and Lancaster County, while being sensitive to business, environmental and neighborhood interests and recognizing the need to sustain long-term economic development opportunities.

Example Tools/Community Approaches

- Planning Tools for Flood Hazard Areas, March 2002 Task Force Materials
- No Adverse Impact White Paper, March 2002 Task Force Materials
- CDM Study – Section 4, Floodplain Mgmt Alternatives & Example Programs
- Factsheets: NAI and Standards Exceeding Federal Requirements

No Adverse Impact:

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